UNITED STATES NAVAL INSTITUTE PROCEEDINGS

For the advancement of professional, literary, and scientific knowledge in the Navy

Volume 66
Whole Numbers 443-454
1940

Edited by

REAR ADMIRAL A. T. CHURCH, *United States Navy*

United States Naval Institute

Publication Office: Menasha, Wisconsin
Editorial and Business Office: Annapolis, Maryland
Advertising Department: **McGill Bldg., Washington, D.C.**

U. S. NAVAL INSTITUTE PROCEEDINGS
INDEX FOR VOLUME 66, 1940

January,	No. 443, pp.	1– 156	July,	No. 449, pp.	921–1070
February,	No. 444, pp.	157– 312	August,	No. 450, pp.	1071–1220
March,	No. 445, pp.	313– 468	September,	No. 451, pp.	1221–1374
April,	No. 446, pp.	469– 620	October,	No. 452, pp.	1375–1528
May,	No. 447, pp.	621– 770	November,	No. 453, pp.	1529–1684
June,	No. 448, pp.	771– 920	December,	No. 454, pp.	1685–1836

Page

A

Accidents—Vessels
Fothering. T. W. Sheridan 824
Mariette Pacha (Fr. SS.) ..... 1066, ill. 1063
Overtaking Situation. R. F. Farwell ... 1558, 1835
Swell Damage. T. W. Sheridan 177
Achilles (Br.) ..... 1833, ills. 247, 1825
Adamson, G., and D. Van Patten: Motor Torpedo Boats: A Technical Study 977
Adell, C. C. 873
Administration and organization: Navy Department, An Organization for. J. K. Taussig 52
Admiral Graf Spee (Ger.) .... 1218, ills. 245, 1096–97
Admiral Scheer (Ger.) ..... ill. 143
Aerial navigation: See Navigation
Aircraft carriers (See also names of)
Aircraft carriers—United States: At sea ... ill. 1531
Airports
Marine Base, La Guardia Field, N. Y. ... ill. 1440
Pan American, Miami, Fla ..... ill. 1071
Pan American, Midway Island ..... ills. 1076, 1598–1600
Pensacola, Fla: Reaching Back. L. W. Parrish ..... 1127, ills. 1124–26
San Juan, P. R. ..... ill. 378
Sunnyvale, Calif. ..... ill. 1588
Airships (See also names of)
Blimps, New York City ..... ill. 1624
Our Lighter-Than-Air Policy. F. X. Carmody 1586
Teaching Old Dog New Tricks. C. S. Rounds ..... 1153, ills. 1159–63
Akron (U.S. airship) ..... ill. 1622
Alaska
Chitina-Fairbanks Road ..... ill. 557
Glacier Bay ..... ills. 560–61
Glaciers ..... ills. 560–61, 1073, 1275
Icebergs ..... ills. 561
Mountains and volcanoes ..... ills. 474, 558, 560, 562–64, 1536
Pacific-Yukon highway route ..... ill. 556
Petersburg ..... ill. 474
Prince William Sound ..... ill. 558
Reminiscences of Chechako. G. T. Rude ... 551
Albion, R. G. 870
Alden, C. S. 1475
Algonquin (U.S. CG) ..... ills. 665–66
Allen, A. M. R. 1169
Almirante Cervera (Sp.) ..... ill. 814
America (U.S. SS) ..... ill. 1828
America (U.S. yacht): Taps for Famous Beauty of Navy. R. White 701, 1019, 1679
American Clipper (U.S. flying boat) ..... ill. 1442
Anchor chain: Evolution and Introduction of Chain Cables. R. P. MacHatton 361
Anchoring Ships on High Seas. H. R. Seiwell ..... 1733, ills. 1725–27
Andrei Pervoswannyi (Rus.) 1324
Anecdote: Letter to Garcia. A. E. True 1718
Annapolis, Md.
Engineering Experiment Station. A. P. Calvert ..... 49, ills. 44–48
Greenbury Point Lighthouse, 1889 ..... ill. 145
Ansel, W. C. 1785
Aquino, R. de 566
Arctic (U.S.) ..... ill. 625
Argentina, Buenos Aires ..... ill. 907
Argonne (U.S.) ..... ill. 625
Ark Royal (Br.) ..... ill. 248
Armknecht, R. F. 106, 570, 722, 874
Astor, J. J. 213
Atlantic Naval Policy for United States. N. J. Padelford 1297
Atlantis, Survey of. G. T. Rude 1105
Australia (Austral.) ..... ill. 141
Australia—Navy: Britain's Junior Navies. D. Cowie ..... 1291, ills. 1292, 1295, 1363
Austro-American Navy. E. E. Hazlett, Jr. 1757
Aviation
Commercial Oversea Aviation Routes. G. S. Bryan 1427, 1525
Navy Gave Me Wings. C. W. Swanson 189
Aviation—Aircraft (See also names of)
Coast Guard ..... ill. 69
Flagplane ..... 149, ill. 1078
Germany ..... ills. 1250–52, 1444
Pan American .... ills. 1071, 1076, 1441, 1598, 1600
Patrol Plane and Future. A. B. Vosseller ... 1577
Russia ..... ills. 1445–46
U. S. Navy . ills. 8, 181–86, 188, 299, 315, 383, 469, 473, 623, 771, 923, 928, 945–48, 1274–75, 1382, 1466–67, 1529, 1531–32, 1536, 1569–76
Azores, Horta ..... ill. 1441

B

B-6 (Sp.) ..... ills. 798
Bacon, R.: Some Facts about Fisher and His Warships 392
Baird, A. L. 256
Baldridge, H. A. 1474
Baleares (Sp.) ..... ill. 799
Balkan War, First: Battles of Helles and Lemnos. K. L. Rankin 693
Baltic, Incident in. G. F. Schultz 854, 1167
Barometric readings in millibars 1783
Barrett, C. D. 871

Page

Bartolomeo Colleoni (It.).....ill. 1830
Basketboat of Asia Minor.....ill. 774
Battles (See also names of battles)
Belvidera (Br.) pursued by American fleet .....color ill. 629
Constitution (U.S.) and *Guerriere* (Br.) .....color ill. 1079
Essex (U.S.) capturing British brig..... .....color ill. 929
Essex (U.S.), *Phoebe*, and *Cherub* (Br.).... .....222, ill. 208
Growler and *Eagle* (U.S.) and British gunboats.....color ill. 1229
Lady of the Lake (U.S.) and *Lady Murray* (Br.).....color ill. 779
Nautilus (U.S.) and *Shannon* (Br.).color ill. 1383
President (U.S.) and *Little Belt* (Br.)..... .....color ill. 477
United States (U.S.) and *Macedonian* (Br.) .....color ill. 321
Vixen (U.S.) and *Southampton* (Br.)..... .....color ill. 9
Wasp (U.S.) and *Frolic* (Br.).....ill. 537
Battleships (See also names of)
Battleships—England
Fisher and His Warships.....97, 307
Fisher and His Warships, Some Facts about. R. Bacon..... 392
Battleships—United States
At sea.ills. 8, 313, 315, 317, 319–20, 384, 469, ...473, 476, 621, 628, 921, 927–28, 1529–30
Battleships. J. E. Hamilton..... 1130
Case for Big Capital Ship. J. K. Taussig... .....929, 1627
Bearn (Fr.).....ill. 1443
Beaver, J. J. Astor's.....215, ill. 211
Belgium
Antwerp.....ill. 1015
Brussels.....ill. 1016
Ghent.....ill. 1015
Belvidera (Br.) pursued by American fleet.... .....color ill. 629
Berwick (Br.).....149, ill. 148
Biddle, J.....214, ill. 212
Bisbee, C. L.: Merchant Marine Training.... 26
Bittinger, C.: Naval Camouflage..... 1394
Blakeslee, H. W.: Life in Samoa..... 345
Blanche (Br.).....ill. 1380
Boarding fight, Z for Zeal.....ill. 609
Bolander, L. H..... 1324
Naval Career of James Fenimore Cooper... 541
Bolivar, S.....ill. 1057
Book reviews
Alexander, R.: *Cruise of the Raider "Wolf"*.. 570
Armitage, M.: *United States Navy*..... 1474
Armstrong, H. G.: *Principles and Practice of Aviation Medicine*..... 571
Banning, K.: *Fleet Today*..... 1784
Barrows, N. A.: *Blow All Ballast!*..... 1169
Brown, R.: *Men, Wind and Sea*..... 722
Continental Machines: *Contour Sawing Handbook*..... 417
Cranwell, J. P., and W. B. Crane: *Men of Marque*..... 1475
Dalzell, G. W.: *Flight from the Flag*..... 1786
Davis, G. T.: *A Navy Second to None*..... 874
Detection and Identification of War Gases... 873
Dictionary of Metals and Their Alloys..... 1025
Divine, A. D.: *In the Wake of the Raiders and the Merchant Navy Fights*..... 1477

Page

Book reviews (Cont.)
Dobie, R. E.: *Captain Dobie's Hand Book of Signals*..... 1478
Dönitz, K.: *Die U-Bootswaffe*..... 105
Dupuy, R. E.: *Perish by the Sword*..... 573
DuVal, M. P., Jr.: *Cadiz to Cathay*..... 1169
Ellsberg, E.: *Men under the Sea*..... 106
Environment and Conflict in Europe..... 724
Excerpts from the International Code of Signals 418
Foertsch, H.: *Art of Modern Warfare*..... 1326
Footner, H.: *Sailor of Fortune*..... 1784
Gaines, H. F.: *Elementary Cryptanalysis*... 261
Graumont, R., and J. Hensel: *Encyclopedia of Knots and Fancy Rope Work*..... 1327
Green, G. A.: *Practical Ship Stability for Beginners*..... 259
Handbook of the Hospital Corps, United States Navy, 1939..... 1024
Hartney, H.: *Up and At 'Em*..... 1025
Ibbetson, W. S.: *Electricity for Marine Engineers*..... 572
Illyne's Star Chart..... 572
James, H. J.: *German Subs in Yankee Waters: First World War*..... 1477
Jane's Fighting Ships, 1939..... 102
Keyhoe, D. E.: *M-Day*..... 1328
Lampson, R.: *Death Loses a Pair of Wings*.. 722
Limpus, L. M.: *Twentieth Century Warfare*.. 871
McMurtrie, F. E.: *World's Warships*..... 1785
Mayo, C. B.: *Your Navy*..... 418
Meterological Glossary..... 872
Mock, J. R., and C. Larson: *Words That Won the War*..... 261
Morison, S. E.: *Portuguese Voyages to America in the Fifteenth Century*..... 1786
Potter, D.: *Sailing the Sulu Sea*..... 571
Pratt, F.: *Sea Power and Today's War*..... 104
Rahola, J.: *Judging of the Stability of Ships*. 417
Revere Weights and Data..... 1328
Riesenberg, F.: *Cape Horn*..... 260
Robinson, G. H.: *Handbook of Admiralty Law in the United States*..... 258
Rodgers, W. L.: *Naval Warfare under Oars*. 870
Rossell, H. E., and L. B. Chapman: *Principles of Naval Architecture*..... 1371
Schurz, W. L.: *Manila Galleon*..... 258
Sprout, H. and M.: *Rise of American Naval Power, 1776–1918*..... 415
Stereographic Projections..... 872
Tobin, H. J., and P. W. Bidwell: *Mobilizing Civilian America*..... 1787
Tornich, M.: *Radius of Action of Aircraft*.. 1476
Tweedie, H.: *Story of a Naval Life*..... 416
Weems, P. V. H.: *Marine Navigation*..... 1024
Weems, P. V. H., and E. A. Link, Jr.: *Simplified Celestial Navigation*..... 723
Bowditch, N..... 1819
Bowman, M. C..... 1478
Brashears, G. W., Jr..... 1786
Brazil
Coffee.....ills. 1223, 1227
Dom Pedro I statue, Rio de Janeiro.....ill. 1228
Mangue Canal, Rio de Janeiro.....ill. 1224
Newsboy statue, Rio de Janeiro.....ill. 1226
Rio de Janeiro...ills. 910–11, 1222, 1224–26, 1228
Sao Paulo.....ills. 1226–27
Sao Vicente monument.....ill. 1223
Tiradentes monument, Ouro Preto.....ill. 1228
Bridge, Firth of Forth.....ill. 1211
Brown, C. R.: Saga of Modern Sea Raider..238, 617

Brown, E. W.: Human Mechanism and Submarine ... 1608
Brown, W. L.: Literature of Sea ... 1424
Bryan, G. S.
Commercial Oversea Aviation Routes. 1427, 1525
Los Jardines (E. D.) ... 520, 867
Buckman (U.S. SS): Holdup. S. A. Wheeler ... 644
Budget, automobile ... 569
Buenzle, F. J.: Collier *Merrimac* ... 1447
Buerkle, E. C., *Helena* drawing ... ill. 1214
Buford (U.S. AT) ... ill. 1404
Bywater, H. C. ... 1525
Byzantine Empire. A. M. Shepard ... 1412

C

C-2 (Sp.) ... ill. 800
C-4 (Sp.) ... ill. 800
CG-407 (U.S. CG) ... ill. 68
Caledonia (Br. SS) ... 1370, ills. 1211, 1370
California
San Diego, Naval Training Station ... ill. 1779
Sunnyvale ... ill. 1588
California State (U.S.): California Nautical School. B. M. Dodson ... 705, ills. 708–16
Calvert, A. P.: U. S. Naval Engineering Experiment Station, Annapolis ... 49
Camouflage ... ill. 251
Naval Camouflage. C. Bittinger ... 1394, ills. 1399–1401
Canada
Bay of Fundy tides ... ills. 1731
Cape Split, Bay of Fundy ... ill. 540
Canada—Navy: Britain's Junior Navies. D. Cowie ... 1291
Canals (See also Panama Canal)
Corinth, Greece ... ill. 1521
Gota, Sweden ... ill. 864
Mangue, Rio de Janeiro, Brazil ... ill. 1224
Canarias (Sp.) ... ill. 815
Canary Islands, Santa Cruz de Tenerife ... ills. 1670–71
Canoes
Colombia ... ill. 909
Samoa ... ill. 343
Caribbean Sea: Résumé of National Interests in Caribbean Area. I. Olch ... 165
Carmody, F. X.: Our Lighter-Than-Air Policy 1586
Catalpa (sailing ship) ... 962, ill. 952
Cayuga (U.S. CG) ... ill. 661
Ceuta (Sp.) ... ill. 801
Chain Cables, Evolution and Introduction of. R. P. MacHatton ... 361
Chamberlin, W.
German Naval Strategy in 1914 ... 1277
Inconsistent American Neutrality ... 1079
Champion, C. C., Jr. ... 260
Chauncey's flotilla and British schooners ... color ill. 165
Cherub, Phoebe (Br.), and *Essex* (U.S.) ... 222, ill. 208
Chicago (U.S.) ... ill. 1235
Officers, 1893–95 ... ill. 1368
Chile, Volcano Osorno ... ill. 909
China: River cargo insurance ... 1067
China Clipper (U.S. flying boat) ... ill. 89
Church, A. T. ... 571
Cimarron (U.S.) ... ill. 1776
Civil War
Commerce Raider off New York. C. C. Hanks ... 1237, 1781
Mines of Long Ago. C. C. Hanks ... 1548
Monitor-Merrimac Legend. A. C. Smith ... 385
Morgan Purchases. R. S. West, Jr. ... 73
Naval Academy, Confederate States ... 717
Clark, E. H., Jr.: Famous Swords at U. S. Naval Academy ... 1769
Clark, E. S., Jr. ... 916
Claudus naval actions ... .765, 1066, color ills. (443) to (452), inclusive.
Coast and Geodetic Survey: Reminiscences of Chechako. G. T. Rude ... 551
Coast Guard
Anniversary, 150th ... 1372
Breeches buoy rescue ... ill. 70
Cleveland Station model ... 150, ill. 144
District chart ... ill. 60
Ice Patrol duty ... ill. 71
Icebreakers. R. H. Macy ... 669, ills. 661–68
Lighthouse Service, Consolidation of, with Coast Guard. R. H. Macy ... 58
Cochrane, E. L. ... 308
Collins, D. E.: Royal Road across Pacific ... 501
Collins, E. B.
Locating Surface Ships with Bubble Octant. 1138
Polar Navigation with H. O. Publication 214. 1713
Collision mats: Fothering. T. W. Sheridan ... 824
Colombia
Canoes ... ill. 909
Cartagena ... ills. 1312
Magdalena River ... ills. 1313
Columbus, C.: Prison and tomb, Santo Domingo City ... ills. 1309
Columbus (Ger. SS) ... 462, ill. 457
Comanche (U.S. CG) ... ill. 667
Communications: Naval Communication Reserve. H. S. Scott ... 369
Confederate States Naval Academy ... 717
Congress (U.S.) ... ill. 456
Constitution (U.S.) and *Guerriere* (Br.) ... color ill. 1079
Convoy zigzag ... ill. 250
Conyngham (U.S.) ... ill. 624
Cooke, C. M. ... 253
Cooper, J. F. ... ill. 533
Naval Career. L. H. Bolander ... 541
Cortez, H. ... 1537
Cowie, D.: Britain's Junior Navies ... 1291
Crane, W. M. ... 78
Crapo, G. R.: An Interrupted Yarn ... 962
Crockett, C. I.: Island Bulwarks ... 372
Cruisers (See also names of)
Cruisers—Russia: At sea ... ill. 1674
Cruisers—United States: At sea ... ills. 621, 921, 923, 1382, 1529, 1533
Cuba, Guantanamo, Fleet at, 1927 ... ill. 1316
Curran, F. M.: Midshipman—U. S. Naval Reserve ... 1741

D

Dale, G. F. ... 100
Dalmatia
Spalato ... ills. 1750–51
Spalato, Allied ships, 1919 ... ill. 1749
Trau ... ill. 1754
Daniels, J. F., *Portsmouth* painting ... ill. 1212
Danis, A. L. ... 872

	Page
Dardanelli (It.) ... ill.	973
Davis, W. H.: Naval Side of Spanish Civil War, 1936–39	803
Davis, W. S. G.: How about Naval Reserve?	352
Dawes, R. A.	261
Decatur, S.: Swords ... ill.	1774
Declaration of Panama	1241
Defender (Br.) ... ills.	610, 764
De Haven, E. J.	1833
Denig, J. L.: Food—Hawaii's Vital Problem	1454
Depth charge explosions ... ill.	301
Destroyers (See also names of)	
Destroyers—Germany: At sea ... ill.	1246
Destroyers—United States	
At anchor ... ills.	318, 474
At sea ... ills.	470, 1529, 1534
Reserve group ... ill.	1381
Deutschland (Ger.) ... ill.	142
Dewey, G.: Germans at Manila Bay ...	843, 845
Discoverer (U.S. C&GS) ... ill.	559
Dixie (U.S.) ... ill.	1777
Dixie Clipper (U.S. flying boat) ... ill.	1439
Dodson, B. M.: California Nautical School	705
Dominican Republic: Columbus, C.: Prison and tomb, Santo Domingo City ... ills.	1309
Dominick, F. J.	1167
Douw, V. P.	722
Ratings by Shakespeare	235
Draken (Swed.) ... ill.	759
Dreadnought (Br.) ...	97, 392
Duncan, J. H.	1328
Dunkerque (Fr.) ... ills.	249, 1101
Dyer, G. C.: Promotion Systems—Past, Present, and Future ...	192, 409

E

Eagle and *Growler* (U.S.) and British gunboats ... color ill.	1229
Ecuador, Quito ... ill.	908
Education: Ye Compleat Naval Officer. A. R. McCracken	22
Edwards, D. J.: Polynesian Navigation	1284
Egypt	
Abu'l-Mahasin's cannon ...	790, 793
Nile boats ... ill.	1832
Ellis, E. B.	1631
Emanuele Filiberto Duca d'Aosta (It.) ... ill.	974
Empress of Britain (Br. SS) ... ill.	1834
Engineering Experiment Station, Annapolis. A. P. Calvert ...	49, ills. 44–48
England	
Durham ... ill.	1100
London ... ill.	1100
Stratford upon Avon ... ill.	1098
England—Navy	
Britain's Junior Navies. D. Cowie	1291
Fisher and His Warships ...	97, 307
Fisher and His Warships, Some Facts about. R. Bacon	392
Englund, H. W.	259
Escanaba (U.S. CG) ... ills.	662–64
Espana (Sp.) ... ill.	795
Espero (It.) ... ill.	1364
Essex (U.S.) capturing British brig ... color ill.	929
Essex (U.S.): First Contacts—Glorious Cruise of Frigate *Essex*. A. S. Merrill	218
Essex (U.S.), *Phoebe*, and *Cherub* (Br.)	222, ill. 208
Exeter (Br.) ... ill.	246
Explorer (U.S. C&GS) ... ills.	614–15, 1123

F

F2 (Ger.) ... ill.	298
Failey, C. F.	718
Falcon (U.S.) ... ill.	1619
Falkland Islands, Battle of	868
Farenholt, A. ...	82, 150
Hawaiian Navy and International Incident	517
Farragut (U.S.) ... ill.	1276
Farrell, E.	1167
Farwell, R. F.: Overtaking Situation ...	1558, 1835
Fechteler, W. M.	258
Finland	
Bath ... ill.	862
Helsinki lightship ... ill.	401
Pistol practice ... ill.	863
Ski training ... ill.	772
Fisher, J. A. ... ill.	460
Fisher and His Warships ...	97, 307
Some Facts about Fisher and His Warships. R. Bacon	392
Fitzgerald, C.	617
FitzGerald, K. B.: Merchant Officer's Place in Naval World ...	224, 719, 1631
Flag etiquette	255
Florida	
American Shoals Lighthouse ... ill.	67
Miami, Pan American Base ... ill.	1071
Pensacola: Reaching Back. L. W. Parrish ...	1127, ills. 1124–26
Folk, W.	717
Fort, Morro Castle, San Juan, P. R.	ills. 377, 379
Fothering. T. W. Sheridan	824
Friede, V. M.	308
Frolic (Br.) and *Wasp* (U.S.) ... ill.	537
Fuel: Oil for Troubled Waters. H. Key, Jr. ...	1253, 1317, 1628

G

Galatea (Sp. sailing ship) ... ill.	809
Garibaldi, G.	31
George W. Campbell (U.S. CG) ... ill.	69
Germany—Navy	
German Naval Strategy in 1914. W. Chamberlin	1277
Patrol boats, Norway ... ill.	1249
Gibraltar: Contraband control ... ills.	1062–63, 1522
Giorgios Averoff (Gr.) ... ill.	761
Glaciers: See Alaska	
Glenten (Dan.) ... ill.	866
Gneisenau (Ger.) ... ill.	1102
Godfrey, T.	1140
Goodwin, J. F.: Ship's Orders—1815	78
Goteborg (Swed.) ... ills.	757–58
Gotland (Swed.) ... ills.	758
Grasse, F. J. P. De	524
Graves, T.	525
Greece	
Athens ... ill.	1520
Corfu ... ill.	1520
Corinth Canal ... ill.	1521
Greenland: From Greenland's Icy Mountains. C. Moran ...	1261, ills. 1263, 1269–71
Grog, Serving, in British Navy ... ill.	687
Growler and *Eagle* (U.S.) and British gunboats ... color ill.	1229
Guam	
Agaña-Piti Road ... ill.	90
Agaña Plaza ... ills.	92–93
Baking day ... ills.	91
Bull cart ... ill.	90

Page

Guam (Cont.).
Coconut gathering ..... ill. 94
Harbor breakers ..... ill. 96
Latte, 2 part stones ..... ill. 516
Our Western Outpost. F. J. Nelson 83
Ranch house ..... ill. 95
Guba (U. S. flying boat) 1584
Guerriere (Br.) and *Constitution* (U.S.) ..... color ill. 1079
Gulliver, L. J. 573
Guns and gunnery
Abu'l-Mahasin's cannon 790, 793
Army, firing ..... ill. 925
Battleships firing ..... ills. 317, 926–27, 1688
Mortar, Coast Artillery ..... ill. 164
Russian ships ..... ills. 1672, 1675–76
Gurkha (Br.) ..... ill. 1380

H

Haag, A. H. 1319
Hairedin Barbarossa (Turk.) ..... ill. 760
Haiti, Christophe's citadel ..... ills. 158, 1315
Halliburton, R. ..... ill. 510
Junk *Sea Dragon* 501
Hamilton, J. E.: Battleships 1130
Hanks, C. C.
Commerce Raider off New York 1237, 1781
Mines of Long Ago 1548
Harvey, H. B. 765, 1783
Hawaiian Islands
Beach ..... ill. 384
Diamond Head ..... ill. 1470
Fishing sampans ..... ill. 1460
Food—Hawaii's Vital Problem. J. L. Denig 1454
Hilo ..... ill. 1466
Kauai coast ..... ill. 383
Lahaina Roads ..... ill. 1469
Napali coast ..... ill. 1467
Navy, Hawaiian, and International Incident. A. Farenholt 517
Pali ..... ill. 1468
Papaya orchard ..... ill. 1455
Pineapple fields ..... ill. 1463
Racial strains ..... ill. 382
Rice fields ..... ills. 1458, 1463
Sugar cane field ..... ill. 1464
Waikiki Beach ..... ill. 1465
Hawley, J. M. 308
Hayden, R. 1024
Hazlett, E. E., Jr.: Austro-American Navy ... 1757
Helena (U.S.) ..... ill. 1214
Helles, Battle of Lemnos and. K. L. Rankin .. 693
Helouan (It. hospital ship) ..... ill. 801
Historic Ships of Navy: See Neeser, R. W.
Hitt, P. 261
Hobson, R. P. 1447
Holdup of SS. *Buckman*. S. A. Wheeler 644
Holland (U.S.) ..... ill. 1618
Hood (Br.) ..... ills. 1095, 1378
Howard, D. G. 572
Howe, H. C. 567
Howland, F.: Sea Power and Central Asia 779
Hulbert, H. S. 1017
Hull, I.: Sword ..... ill. 1775
Huse, J. O. 1169
Hyatt, D. 872, 1024

I

Icebergs ..... ills. 561, 1272–73
Icebreakers. R. H. Macy ..... 669, ills. 661–68
Illinois (U.S.) 1741
Independence (U.S.): Ship's Orders—1815. J. F. Goodwin 78
India: Oxcart ..... ill. 773
India—Navy: Britain's Junior Navies. D. Cowie 1291
Industrial Research. C. L. Petze, Jr. ..... 1148, ills. 1164–65
Insurance: Yangtse River, China 1067
International law: Recent Trends in International Law. P. S. Wild, Jr. 18
International relations
Atlantic Naval Policy for United States. N. J. Padelford 1297
Caribbean Area, Résumé of National Interests in. I. Olch 165
Interrelation of Foreign and Naval Policies in American History. M. F. Talbot 650
United States Looks to Her Future on Sea. L. P. Lovette 1383
Irish Pennants: See Traditions, customs, and sea terms
Irish political prisoners and *Catalpa* 962
Iroquois (U.S.) ..... 31, ill. 42
Italy
James Shedden Palmer, Forgotten Protagonist of Risorgimento. C. Moran 31
Palermo ..... ill. 43
Italy—Navy
Ship superstructure ..... 1066, 1217, ill. 975
Ships at Naples ..... ills. 1362, 1365

J

J-4 (U. S. airship): Teaching Old Dog New Tricks. C. S. Rounds ..... 1153, ills. 1159–63
Jaime I (Sp.) under bombardment ..... ill. 802
Jamaica, Kingston ..... ill. 159
Jasperson, R. E. 416, 566
Jones, J. P.: Swords ..... ills. 1773
Jose Luis Diez (Sp.) ..... ill. 796
Josh V. Throop (Ohio River steamer) ..... ill. 1402
Junks ..... 501, ills. 507, 509–13
Jutland, Battle of: Meteorological Conditions, Effects of, on Tactical Operations. A. E. True 9

K

Kaimiloa (Hawaiian Navy) ..... 518, ills. 514–15
Kalakaua, Hawaiian King ..... 517, ill. 514
Karlsruhe (Ger.) ..... ills. 161, 763
Keator, F. W. 256
Key, H., Jr.: Oil for Troubled Waters 1253, 1317, 1628
Kieffer, R. W.: See White, R.
Kirkpatrick, R. Z. 1471
Klas Horn (Swed.) ..... ill. 758
Knuepfer, G.: Center of Typhoon 1003
Kronprinz Wilhelm (Ger.): Saga of Modern Sea Raider. C. R. Brown 238, 617

L

Lady Murray (Br.) and *Lady of the Lake* (U.S.) ..... color ill. 779
Lady of the Lake (U.S.) and *Lady Murray* (Br.) ..... color ill. 779
Laird, O. C. 1786
Lake Titicaca balsa boat ..... ill. 913
Lawrence, J. ..... ill. 536
Leif Erikson (Viking ship replica) ..... ill. 839
Lemnos, Battle of Helles and. K. L. Rankin .. 693

Page

Lepawsky, A. ... 1625
Leverton, J. W.: Irish Pennants ... 414, 869
Lewis, C. L.: English Short Stories of Sea ... 1552
Lexington (U.S.) ... ills. 187, 1376
Libecco (It.) ... ill. 974
Lighthouse Service: Consolidation of Lighthouse Service with Coast Guard. R. H. Macy ... 58
Lighthouses
  American Shoals, Fla. ... ill. 67
  Cape Henry, Va. ... ill. 66
  Greenbury Point, Annapolis, Md., 1889. ill. 145
  Minots Ledge, Boston, Mass. ... 59, ill. 65
  Cornfield Point, Long Island Sound ... ill. 68
  Helsinki, Finland ... ill. 401
Lisle, B. O. ... 868, 1628
Little Belt (Br.) and *President* (U S.). color ill. 477
Livingston, B. ... 308, 567, 1787
  Are We Ready? ... 629
  Oslo Viking Ship Hall ... 828
Lloyd, I. R., painting ... 922, 1067
Loeb, L. B. ... 791
Log storage, Pensacola, Fla ... 1127
Lombardy (Br. SS) ... ill. 1829
Los Angeles (U.S. airship) ... ill. 1623
Los Jardines, (E.D.). G. S. Bryan ... 520, 867
Lovette, L. P.: United States Looks to Her Future on Sea ... 1383
Luce, S. B.: *Luce's Seamanship* ... 151
Lukin, A. P.: Secrets of Mine Warfare ... 642
Lydonia (U.S. C&GS) ... ill. 1119
Lyon, H. N. ... 569

M

McCracken, A. R.: Ye Compleat Naval Officer 22
McCutcheon, J. T.: Battle of Manila Bay ... 843
McDonald, L. H. ... 723
McGuire, H. D.: American Inventor of Reflecting Quadrant ... 1140
McInerney, F. X. ... 258
McKeesport (U.S. SS) ... ill. 1406
McLean, E. R., Jr. ... 1784
McManes, K. M. ... 1477
Macdonough, T.: Sword ... ill. 1775
Macedonian (Br.) and *United States* (U.S.) ... color ill. 321
MacFall, R. C. ... 104
MacHatton, R. P.
  Evolution and Introduction of Chain Cables 361
  Red Cross at Masthead ... 1407
Macon (U.S. airship) ... ill. 1588
Macy, R. H.
  Consolidation of Lighthouse Service with Coast Guard ... 58
  Icebreakers ... 669
Mahan, A. T. ... 1369, 1524, 1625, ills. 1221, 1232, 1368
  Re-examination of Mahan's Concept of Sea Power. W. D. Puleston ... 1229
Mahoning (U.S. CG) ... ill. 68
Malieota, Samoan King ... ill. 515
Manila Bay, Battle of: Dewey and Germans ... 843, 845
Manning, H.: "Ten Minutes." ... 1590
Marat (Rus.) ... ills. 612, 1676
Mariette Pacha (Fr. SS) ... 1066, ill. 1063
Martin, H. P.: Sea Scouts, B.S.A. ... 997
Mary E. Morse (U. S. schooner) ... ill. 1403
Massachusetts: Minots Ledge Lighthouse ... 59, ill. 65
Mazet, H. S. ... 1025

Page

Mecidiye (Turk.) ... ill. 760
Medicine and surgery: Scurvy, Influence of, Maritime History. L. H. Roddis ... 330, 917, 1167
Melilla (Sp.) ... ill. 801
Mendl, W. V. ... 97, 255
Merchant marine cartoons ... ills. 205–7
Merchant marine—United States
  Conference, 1940 ... 1525, 1835
  Naval Reserve: See Naval Reserve
  Ships for What? H. Trott ... 321, 1319
  Training, Merchant Marine. C. L. Bisbee ... 26
Merchant ships (See also names of)
  German ... ill. 1314
  Our Shipping Renaissance ... 308
Merrill, A. S.: First Contacts—Glorious Cruise of Frigate *Essex* ... 218
Merrimac (Confed.): *Monitor-Merrimac* Legend. A. C. Smith ... 385
Merrimac (U.S.): Collier *Merrimac*. F. J. Buenzle ... 1447
Meteor (Ger.) ... ill. 1314
Meteorology
  Clouds ... ills. 3–7
  Jutland, Effects of Meteorological Conditions on Tactical Operations. A. E. True. 9
  Lightning ... ill. 1
  Typhoon, Center of. G. Knuepfer ... 1003, ills. 1010–13
  Waterspout ... ill. 2
Mexico: Tenochtitlan—Naval Classic. W. S. Wharton ... 1537
Midway Island
  Midway—North Pacific's Tiny Pet. H. C. Votaw ... 1601
  Pan American Base ... ills. 1076, 1598–1600
"Milen" for nautical mile ... 765
Mindte, R. W. ... 1781
Mine Force Association, North Sea ... 462
Mine layer, Submarine ... ill. 300
Mines
  Explosion ... ill. 297
  Mines of Long Ago. C. C. Hanks ... 1548
  Rules of mine warfare ... 1677
  Secrets of Mine Warfare. A. P. Lukin ... 642
Models
  Cardboard navy ... ills. 1213
  Coast Guard Station, Cleveland, Ohio ... 150, ill. 144
  Gommi, T., invitation ... 1371
Modoc (U.S. CG) ... ill. 1273
Moise, B. C. ... 307
Monitor (U.S.): *Monitor-Merrimac* Legend. A. C. Smith ... 385
Monuments and memorials
  Dom Pedro I, Rio de Janeiro, Brazil ... ill. 1228
  Newsboy, Rio de Janeiro, Brazil ... ill. 1226
  Sao Vicente, Brazil ... ill. 1223
  Scottish-American, Edinburgh ... ill. 1099
  Statue of Liberty, New York City ... ill. 1406
  Tiradentes, Ouro Preto, Brazil ... ill. 1228
Morale in New World War. M. M. Witherspoon ... 675, 1017
Moran, C.
  From Greenland's Icy Mountains ... 1261
  James Shedden Palmer ... 31
Morgan, G. D.: Morgan Purchases. R. S. West, Jr. ... 73
Moses, S. E. ... 717
Motorboats, Ventnor type ... ills. 989–90

Page

760

1167
801
255
205–7

1835

1319
26

1314
308

218

385

1447
1314

3–7

9
1

0–13
2

1537

1601
1600
765
1781
462
300

297
1548
1677
642

1213

144
371
273
307

385

228
226
223
099
406
228

017

261
31

73
717
-90

Page

Mountains and volcanoes
Alaska: See Alaska
Hawaiian Islands....ill. 383
Mombacho, Nicaragua....ill. 162
Osorono, Chile....ill. 909
Puerto Rico....ill. 380
Myers, G. B.... 1019

N

Nautical mile word "milen".... 765
Nautilus (U.S.) and *Shannon* (Br.)...color ill. 1383
Naval Academy
Boxing, Navy Juniors....ill. 459
Cartoons, *Shakings*....ills. 1366–67
Chapel....1068, ill. 1064
Mess hall....305, ills. 302–4
Museum.... 767
Pan-American Week....916, ills. 1061
Practice cruise....916, 1067
Prizes to graduates.... 915
Stribling Walk and Mahan Hall....ill. 1780
Tide station....ill. 1730
Naval Academy, Confederate States.... 717
Naval Historical Foundation.... 154
Naval Institute
Addresses....766, 917
Articles, rates of payment.... 1372
Calendar....766, 1068, 1525, 1680
Changes in officers....461, 463, 617, 766, ...915, 917, 1068, 1526
Meetings and reports....461, 466
Membership and subscription information.. 1680
Publications....150–51, 461, 1217, 1680
What we have been reading.... 306
Naval Reserve
Communication Reserve, Naval. H. S. Scott. 369
Drills....ills. 1516–17
How about Naval Reserve? W. S. G. Davis.. 352
Merchant Marine Reservist, Thoughts of... 567
Merchant Officer's Place in Naval World. K. B. FitzGerald....224, 719, 1631
Midshipman—U.S. Naval Reserve. F. M. Curran.... 1741
Midshipmen training....1168, 1215, 1371, 1834, ...ills. 1685–92
Naval stations
Airports: See Airports
Engineering Experiment Station, Annapolis. A. P. Calvert....49, ills. 44–48
Island Bulwarks. C. I. Crockett.... 372
Naval Training Station, Newport, R.I....ill. 1778
Naval Training Station, San Diego, Calif. ill. 1779
Naval Training Station parade....ill. 626
Navigation
H. O. Publication 214, Polar Navigation with. E. B. Collins.... 1713
Modern Air and Marine Navigation. P. V. H. Weems.... 490
Nautical Almanac, Supplement to.... 566
Octant, Bubble, Locating Surface Ships with. E. B. Collins.... 1138
Polynesian Navigation. D. J. Edwards..... 1284
Position Finding by Planets. P. V. H. Weems 967
Rate of Change of Altitude.... 256
Sextant, Bubble, Earth's Rotational Effect on. P. V. H. Weems and T. L. Thurlow.. 1420
Navy Department, An Organization for. J. K. Taussig.... 52

Page

Neeser, R. W.: Historic Ships of Navy
Porpoise.... 647
Powhatan.... 496
Nelson, F. J.
Guam—Our Western Outpost.... 83
Neutrality Zone of Americas.... 1241
Netherlands
Amsterdam....ill. 1014
Rotterdam....ill. 1014
Volendam girls....ill. 1016
Neutrality
Inconsistent American Neutrality. W. Chamberlin.... 1079
Neutrality Zone of Americas. F. J. Nelson... 1241
New York, Buffalo, old print....ill. 539
New York City
Skyline....ills. 1375, 1624
Statue of Liberty....ill. 1406
New Zealand—Navy: Britain's Junior Navies. D. Cowie.... 1291
Nicaragua, Mt. Mombacho....ill. 162
Nino Bixio (It.)....ill. 1753
Nocomis (U. S. schooner)....ill. 1403
Nordenskjold (Swed.)....ill. 758
Norway
German patrol boats....ill. 1249
Oslo Viking Ship Hall. B. Livingston. 828, ill. 838
Nylon yarn plant, Du Pont....ill. 1165

O

Oberon (Br.)....ill. 611
Oceanography
Anchoring Ships on High Seas. H. R. Seiwell. ....1733, ills. 1725–27
Atlantis, Survey of. G. T. Rude.... 1105
Los Jardines, (E.D.). G. S. Bryan....520, 867
Tides, Prediction of P. C. Whitney.... 1720, ...ills. 1728–31
Octant, Bubble, Locating Surface Ships with. E. B. Collins.... 1138
Ohio, Cleveland Coast Guard Station model... 150, ...ill. 144
Oil: See Fuel
Olav Tryggvason (Nor.)....ill. 842
Olch, I.... 1627
Résumé of National Interests in Caribbean Area.... 165
Ontario (U.S.)....ill. 209
Voyage, 1817–19. C. O. Paullin.... 213
Opdycke, L.... 149
Order Books: Ship's Orders—1815. J. F. Goodwin.... 78
Oregon (U.S.)....ill. 1450
Oregon, Astoria, 1813....ill. 210
Organization: See Administration and
Ornen (Dan.)....ill. 866

P

PC-450 (U.S.)....ill. 1756
Pacific Ocean: Polynesian Navigation. D. J. Edwards.... 1284
Padelford, N. J.: Atlantic Naval Policy for United States.... 1297
Palmer, J. S....ill. 41
Forgotten Protagonist of Risorgimento. C. Moran.... 31
Panama ruins, old Panama....ills. 157, 1060
Panama Canal
Construction, 1909 and 1911....ills. 1075
Gatun Spillway....ill. 1074

Page

Panama Canal (Cont.)
Hood (Br.) ... ill. 1378
Lexington (U.S.) ... ills. 475, 1376
Smoke screen ... ill. 163
Statistics and traffic oddities ... 1471
Steamship ... ill. 1376
Steel Exporter (U.S. SS) ... ill. 1377
Paper work: Letter to Garcia. A. E. True ... 1718
Pariskaya-Kommuna (Rus.) ... ill. 1675
Parker, R. C. ... 565
Some Special Uses of Smoke Screens ... 953
Parrish, L. W.: Reaching Back ... 1127
Pate, R. M. ... 1326
Patterson, C. R.: *Young America* ... 390
Paullin, C. O.: Voyage of *Ontario*, 1817–19 ... 213
Paulus address re talkers ... 1104
Peder Skram (Dan.) ... ill. 865
Percival, F. G. ... 97, 307
Future Naval War ... 1699
Threat and Opportunity ... 477, 868
Personnel
Duty: Ye Compleat Naval Officer. A. R. McCracken ... 22
Line Officer Problem ... 253
Promotion Systems—Past, Present, and Future. G. C. Dyer ... 192, 409
Ratings by Shakespeare. V. P. Douw ... 235
Perth (Austral.) ... ill. 1363
Petropavlovsk (Rus.) ... 1324
Petze, C. L., Jr.: Industrial Research ... 1148
Philippine Islands
Cavite ... ill. 1077
Typhoon, Center of. G. Kneupfer ... 1003, ... ills. 1010–13
Phoebe, Cherub (Br.), and *Essex* (U.S.) 222, ill. 208
Pickerel (U.S.) ... ill. 472
Pigeon (U.S.) ... 1003, ill. 1009
Pittsburgh (U.S.) ... ill. 1749
Pluton (Fr.) wreck ... 462, ill. 458
Pocahontas (U.S.) ... ill. 1234
Policy: See International relations
Polynesian Navigation. D. J. Edwards ... 1284
Pompano (U.S.) ... 1067, ill. 922
Popper, W.: Performance of Medieval Cannon. 790
Porpoise (U.S.) ... 647
Porter, D. ... 218
Portsmouth (U.S.) ... ill. 1212
Powhatan (U.S.) ... 496
Pratt, F. ... 100, 565, 868
Preble, E.: Sword ... ill. 1775
Preparedness: Are We Ready? B. Livingston ... 629
President (U.S.) and *Little Belt* (Br.) ... color ill. 477
President Coolidge (U.S. SS) ... 501
Promotion: See Personnel
Puerto Rico
Capitol ... ill. 924
Morro Castle, San Juan ... ills. 377, 379
Mountains ... ill. 380
San Juan ... ill. 378
Street scene ... ill. 381
Puleston, W. D.: Re-examination of Mahan's Concept of Sea Power ... 1229

Q

Quadrant, Reflecting, American Inventor of. H. D. McGuire ... 1140

R

Radetzky (Austrian) ... 1759, ill. 1749
Radiocompass bearings heeling error ... 718
Raleigh (U.S.) ... ill. 818
Rankin, K. L.: Battles of Helles and Lemnos. 693
Recreation: Morale in New World War. M. M. Witherspoon ... 675, 1017, ills. 678, 685–92, ... 778, 859–61, 1018, 1207–9
Red Cross (U.S. SS) ... ill. 1405
Red Cross (U. S. yacht) ... ill. 1403
Red Cross at Masthead. R. P. MacHatton ... 1407, ... ills. 1402–6
Red Cross fleet, 1898 ... ill. 1403
Red Rover frontispiece, 1859 ... ill. 534
Reliance (Ger. SS) ... 1066, ill. 762
Research, Industrial. C. L. Petze, Jr. ... 1148, ... ills. 1164–65
Revolutionary War: See Virginia Capes, Battle of
Rhode Island: Newport, Naval Training Station ... ill. 1778
Robertson, H. T.: Motor Torpedo Boats ... 1289
Roddis, L. H.: Influence of Scurvy upon Maritime History ... 330, 917, 1167
Rodgers, W. L.
Possible Peace Terms—Present War ... 1088
Vikings ... 829
Roosevelt, F. D.: Newport, R. I. inspection. ill. 1778
Roper, J. W.: Performance of Abu'l-Mahasin's Royal Cannon ... 793
Rounds, C. S.: Teaching Old Dog New Tricks. 1153
Royal, W. F. ... 1478
Rude, G. T.
Reminiscences of Chechako ... 551
Survey of Atlantis ... 1105
Rules of road: See Accidents—Vessels
Rumania, rural scenes ... ills. 775–76
Rurik (Rus.) ... 1325
Russia
Comenetz Podolsk ... ill. 777
Forest shell explosion ... ill. 404
Murmansk ... ill. 408
Niva River ... ill. 402
Sleds ... ills. 403, 406–7
Soroka ... ill. 405
Russia—Navy: Training activities. ills. 1672, 1675–76

S

SC-227 (U.S.) ... ill. 1752
SC-324 (U.S.) ... ill. 1752
SC-338 (U.S.) ... ill. 1754
Sacramento (U.S.) ... ills. 146–47
Saguenay (Can.) ... 256
Sailing ships (See also names of ships)
Young America. C. R. Patterson ... 390, ills. 453–55
Samoa
Beaches ... ills. 337, 342–44
Canoes ... ill. 343
Chief's fale ... ill. 339
Fita Fita guards ... ill. 338
Hawaiian Navy and International Incident. A. Farenholt ... 517
Hurricane of 1889 ... 308
Life in Samoa. H. W. Blakeslee ... 345
Maps ... 346, 348
School ... ills. 340–41
San Antonio (U.S. SS) ... ill. 1403
San Francisco (U.S.) ... 149, ill. 148
Saratoga (U.S.) ... ill. 1072
Schade, H. A. ... 417
Scharnhorst (Ger.) ... ill. 1247
Schornstheimer, G. ... 102

Page

Schultz, G. F.: Incident in Baltic.....854, 1167
Scotland
  Abbotsford.....ill. 1098
  Edinburgh.....ills. 1099
Scott, H. S.: Naval Communication Reserve.. 369
Scurvy, Influence of, upon Maritime History. L. H. Roddis.....330, 917, 1167
Sea Dragon, R. Halliburton junk...501, ills. 509–11
Sea power
  Asia, Sea Power and Central. F. Howland... 779
  Re-examination of Mahan's Concept of Sea Power. W. D. Puleston..... 1229
  United States Looks to Her Future on Sea. L. P. Lovette..... 1383
Sea Scouts
  Drills.....ills. 1518–19
  Sea Scouts, B.S.A. H. P. Martin..... 997
Sea stories
  English Short Stories of Sea. C. L. Lewis.... 1552
  Literature of Sea. W. L. Brown..... 1424
Seal (U.S.).....ill. 622
Searchlight drill.....ill. 627
Seashore at night.....ill. 72
Seiwell, H. R.: Anchoring Ships on High Seas.. 1733
Selection: See Personnel
Settle, T. G. W..... 868
Sextant, Bubble, Earth's Rotational Effect on. P. V. H. Weems and T. L. Thurlow..... 1420
Shakespeare, Ratings by. V. P. Douw..... 235
Shannon (Br.) and *Nautilus* (U.S.)...color ill. 1383
Shepard, A. M.: Byzantine Empire..... 1412
Sheridan, T. W..... 719
  Fothering..... 824
  Swell Damage..... 177
Simpson (U.S.).....ill. 950
Sims, W. S..... 1217
Sinton, W..... 1476
Sjolejonet (Swed.).....ill. 759
Skeena (Can.)..... 256
Small, E. G..... 1784
Smiley, S. A..... 105
Smith, A. C.: *Monitor-Merrimac* Legend..... 385
Smith, R. H.: Mosquito Stings..... 1693
Smoke Screens, Some Special Uses of. R. C. Parker..... 953
South Africa—Navy: Britain's Junior Navies. D. Cowie..... 1291
Southampton (Br.) and *Vixen* (U.S.)...color ill. 9
Southern Cross (U.S. SS).....ill. 1515
Spain
  Civil War, Naval Side of Spanish, 1936–39. W. H. Davis..... 803
  Oil fire, Almeria.....ill. 797
Spanish-American War (See also names of battles)
  Collier *Merrimac*. F. J. Buenzle..... 1447
Spetsai (Gr.).....ill. 761
Standley, W. H..... 415
State of Texas (U.S. SS).....ill. 1403
Steel Exporter (U.S. SS).....ill. 1377
Stengel, B. A..... 308
Stewart, G. V.: Design for War—To Promote Peace..... 941
Stewart, W. C..... 1328
Stockholm (Swed.).....ill. 757
Stores, Taking on.....ills. 314, 316
Strategy and tactics.
  Smoke Screens, Some Special Uses of. R. C. Parker..... 953
  Threat and Opportunity. F. G. Percival.477, 868

Page

Stuart, H. A..... 1317
Submarine chasers (See also names: *SC* and *PC*)
  Austro-American Navy. E. E. Hazlett, Jr... 1757
  Return to New York, 1919.....ill. 1755
Submarine escape device or "lung".....ill. 1620
Submarine escape training tank.....ill. 1621
Submarine rescue and salvage chamber....ill. 1619
Submarines (See also names of)
  Human Mechanism and Submarine. E. W. Brown..... 1608
  Mine layer.....ill. 300
  O-boat designation..... 307
Submarines—England
  Launching.....ill. 1379
  Tender and.....ill. 1362
Submarines—Germany: Returning from cruises. .....ills. 1245
Submarines—United States: Moored to tender .....ills. 1535, 1618
Sverige (Swed.).....ill. 758
Swan, W. U..... 1679
Swanson, C. W.: Navy Gave Me Wings..... 189
Sweden
  Gota Canal.....ill. 864
  Stockholm.....ill. 864
Swell (wave) damage: See Accidents—Vessels
Swords: See Trophies and relics
Sylph (U.S.).....ill. 1827
Syosky (Fin.).....ill. 613

T

Tacony (Confed.)..... 1781
Tactics: See Strategy and
Tahoma (U.S. CG).....ill. 668
Tai Ping (junk).....503, 507, ills. 512–13
Talbot, M. F.: Interrelation of Foreign and Naval Policies in American History..... 650
Tallahassee (Confed.).....1237, 1781
Tarpon (U.S.).....ill. 1617
Taussig, J. K.....253, 409, 867
  An Organization for Navy Department.... 52
  Case for Big Capital Ship.....929, 1627
Taylor, W. L..... 418
Tenochtitlan, Battle of: Naval Classic. W. S. Wharton..... 1537
Teruel (Sp.).....ill. 801
Thousand Islands, St. Lawrence River....ill. 538
Thurlow, T. L. (joint author): See Weems, P. V. H.
Tides: See Oceanography
Torpedo boats (See also names of)
  British, Kronstadt, 1919..... 1324
  England.....ills. 976, 979, 991–94
  France.....ill. 985
  Germany.....ills. 986, 1248
  Italy.....ills. 471, 969–73, 982, 984
  Mosquito boat, Use of term..... 1371
  Mosquito Stings. R. H. Smith..... 1693
  Motor Torpedo Boats. H. T. Robertson.... 1289
  Motor Torpedo Boats: A Technical Study. G. Adamson and D Van Patten..... 977
  Norway.....ill. 978
  Painting, British.....ill. 976
  Philippines.....ill. 987
  Russia.....ills. 985, 1673, 1732
Torpedoed ship.....ill. 252
Towing: Coast Guard, icebound vessels..ills. 665–67
Towner, G. C..... 1025
Traditions, customs, and sea terms
  Finnish sailors..... 150

Page

Traditions, customs, and sea terms (Cont.)
Irish Pennants....414, 869
"Milen" for nautical mile....765
Salutes, gun....82
Trophies and relics: Famous Swords at U. S. Naval Academy. E. H. Clark, Jr....1769, ...ills. 1773–75
Trott, H.: Ships for What?....321, 1319
True, A. E.
Effects of Meteorological Conditions on Tactical Operations at Jutland....9
Letter to Garcia....1718
Truxtun (U.S.)....ill. 950
Turner, R. K....565

U

Ugolino Vivaldi (It.)....ill. 1831
United States (U.S.) and *Macedonian* (Br.)....color ill. 321
United States Navy
Names of officers....414
Vessels building....731, 1065, 1523, 1679
Uruguay, Montevideo....ill. 912
Utah (U.S.) mural....305, ill. 304

V

Valier, L. A., Jr....1833
Van Patten, D. (joint author): See Adamson, G.
Velasco (Sp.)....ill. 799
Venezuela
Caracas....ills. 1057–60
La Guaira....ills. 914, 1310–11
Viatka (Rus.)....1325
Viking ships
Oslo Viking Ship Hall. B. Livingston....828, ill. 838
Vikings. W. L. Rodgers....829, ills. 835–41
Vincennes (U.S.)....ill. 949
Violet (U. S. lighthouse tender)....ill. 68
Virgins Islands: Transfer of sovereignty, 1917. ....ill. 160
Virginia: See *Merrimac* (Confed.)
Virginia, Cape Henry Lighthouse....ill. 66
Virgnia Capes, Battle of, 1781. R. Weed....524
Vixen (U.S.) and *Southampton* (Br.)...color ill. 9
Volcanoes: See Mountains and
Vosseller, A. B.: Patrol Plane and Future....1577
Votaw, H. C.: Midway—North Pacific's Tiny Pet....1601
Vulcano (Sp.)....ill. 822

W

War: Design for War—To Promote Peace. G. V. Stewart....941
War of 1812
Claudus water colors: See Claudus
First Contacts—Glorious Cruise of Frigate *Essex*. A. S. Merrill....218
Ware, R. L....571
Warfare, Aerial
Aircraft use in past....1524
Rules 1923....1523

Page

Warfare, Naval (See also Strategy and tactics)
Future Naval War. F. G. Percival....1699
Warship, Intermediate....100, 565, 868
Washington (U.S.) launching....ills. 951, 1166
Washington (U.S. SS): "Ten Minutes." H. Manning....1590, ills. 1593–97
Wasp (U.S.) and *Frolic* (Br.)....ill. 537
Watertown (U.S. SS)....ills. 1669
Wave damage: See Accidents—Vessels
Weather: See Meteorology
Weed, R.: Battle of Virginia Capes, 1781....524
Weems, P. V. H.
Modern Air and Marine Navigation....490
Position Finding by Planets....967
Weems, P. V. H., and T. L. Thurlow
Earth's Rotational Effect on Bubble Sextant....1420
Welanetz, L. F....417
Welch, J. W....501, ill. 510
Welles, G.: Morgan Purchases. R. S. West, Jr. 73
Wellings, T. F....572
Weser (Ger. MS)....ill. 1826
West, R. S., Jr.: Morgan Purchases....73
Whales and whaling museum, Sandwich, Mass. 916
Wharton, W. S.: Tenochtitlan—Naval Classic. 1537
Wheeler, S. A.: Holdup of SS. *Buckman*....644
White, R.: Taps for Famous Beauty of Navy....701, ...1019, 1679
Whitney, P. C.: Prediction of Tides....1720
Wild, P. S., Jr.: Recent Trends in International Law....18
Wilson, A. L.: Translation....642
Wing-and-Wing frontispiece, 1864....ill. 535
Witherspoon, M. M.: Morale in New World War....675, 1017
World War (See also names of battles)
Austro-American Navy. E. E. Hazlett, Jr... 1757
Baltic, Incident in. G. F. Schultz....854, 1167
German Naval Strategy in 1914. W. Chamberlin....1277
Kronprinz Wilhelm (Ger.): Saga of Modern Sea Raider. C. R. Brown....238, 617
World War II
Contraband control...ills. 1062–63, 1522, 1669–71
Morale in New World War. M. M. Witherspoon....675, 1017
Peace Terms, Possible. W. L. Rodgers....1088
Ships lost....1065, 1215, 1678, 1833
"Ten Minutes." H. Manning...1590, ills. 1593–97
Wright, H. J.: Batten Down Hatch....1103
Wright, R. H....1327

Y

Young America (U. S. clipper)....ills. 453–55
By C. R. Patterson....390

Z

Zeffiro (It.)....ill. 1364
Zrinyi (Austrian)....1759

Page
1699
868
1166
593–97
537
1669
524
490
967
1420
417
510
73
572
1826
73
916
1537
644
701,
1679
1720
18
642
535
1017
1757
1167
1277
617
69–71
1017
1088
1833
93–97
1103
1327
53–55
390
1364
1759